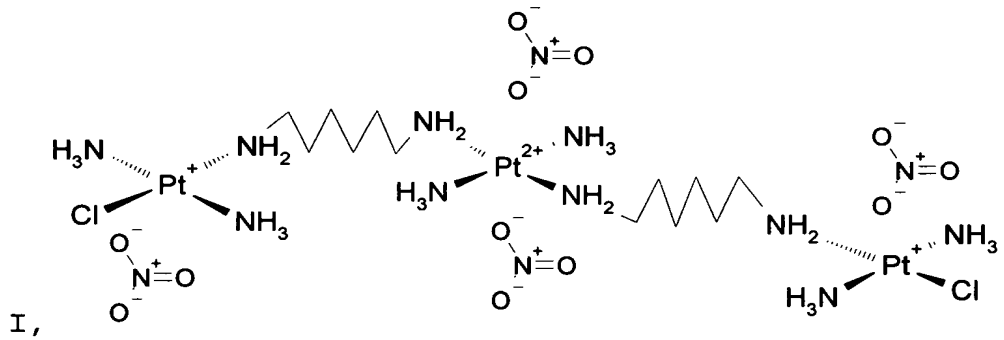
IN THE CLAIMS

1. (currently amended) Solid Lipid Nanoparticles ~~of~~comprising a hydrophilic platinum complex ~~characterized by~~ comprising anionic ligands and ligands containing amino groups~~, comprising a platinum compound dissolved in an aqueous solution~~.

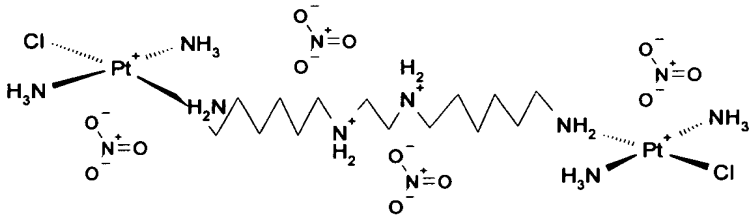
2. (currently amended) The Solid Lipid Nanoparticles ~~of a platinum complex~~ of claim 1, wherein the platinum complex is selected from the group consisting of trans-{bis[trans(diammine)(chloro)platinum (II) (μ-1,6-hexanediamine)]}diammineplatinum tetranitrate salt of formula I,



I,

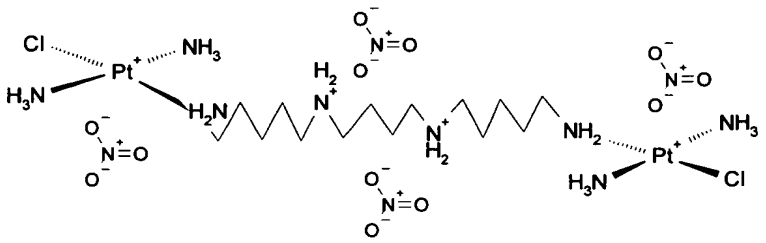
Formula I

bis{trans(diammine)(chloro)platinum(II)}μ-(1,16-diamino-7,10-diazahexadecane-N1,N16) dinitrate salt $2HNO_3$ of formula II,



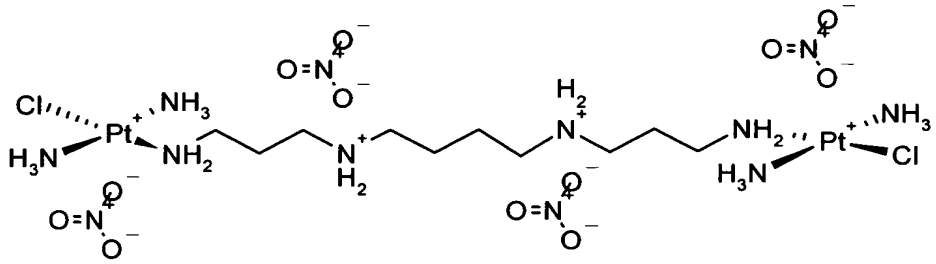
Formula II

bis{trans(diammine)(chloro)platinum(II)}μ-(1,16-diamino-6,11-diazahexadecane-N1,N16) dinitrate salt $2HNO_3$ of formula III,



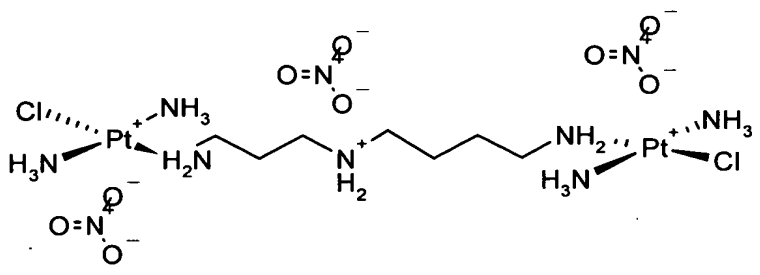
Formula III

bis{trans(diammine)(chloro)platinum(II)}-μ-(1,12-diamino-4,9-diazadodecane-N^1,N^{12}) dinitrate salt $2HNO_3$ of formula IV,



Formula IV

and bis{trans(diammine)(chloro)platinum (II)}-μ-(1,8-diamino-4-azaoctane-N^1,N^8) dinitrate salt HNO_3 of formula V



Formula V.

3. (currently amended) The Solid Lipid Nanoparticles ~~of a platinum complex~~ of claim 1 obtainable by a process comprising:

a. preparing a first microemulsion by mixing a molten lipid, a surfactant, and optionally a co-surfactant and an aqueous solution of the platinum ~~compound~~complex;

b. preparing a solution by mixing a surfactant and optionally a co-surfactant in water, heating to complete solution, preferably at the same melting temperature of the lipid used in a) and adding a co-surfactant;

c. dispersing the microemulsion obtained in a) into the solution obtained in b) obtaining a multiple microemulsion c);

d. dispersing the microemulsion obtained in c) in aqueous medium at a temperature ranging from 0.5°C to 4°C obtaining a dispersion of solid lipid microspheres; and

e. washing with aqueous medium through ultrafiltration the obtained lipid microspheres obtained in d) and lyophilizing, optionally in the presence of a bulking agent and of a cryoprotecting agent.

4. (currently amended) A process for the preparation of the Solid Lipid Nanoparticles ~~of a platinum complex~~ of claim 1, comprising:

a. preparing a first microemulsion by mixing a molten lipid, a surfactant, and optionally a co-surfactant and an aqueous solution of the platinum complex;

b. preparing a solution by mixing a surfactant and optionally a co-surfactant in water, heating, preferably at the same melting temperature of the lipid used in a) and adding a co-surfactant;

c. dispersing the microemulsion obtained in a) into the solution obtained in b) obtaining a multiple microemulsion c);

d. dispersing the microemulsion obtained in c) in aqueous medium at a temperature ranging from 0.5°C to 4°C obtaining a dispersion of solid lipid microspheres; and

e. washing with aqueous medium through ultrafiltration the obtained lipid microspheres obtained in d) and lyophilizing, optionally in the presence of a bulking agent and of a cryoprotecting agent.

5. (currently amended) A pharmaceutical composition comprising the Solid Lipid Nanoparticles ~~of a platinum complex~~ of claim 1.

6. (currently amended) A method of treating a patient affected by cancer sensitive to platinum complexes, which comprises administering to said patient a therapeutically effective amount of the Solid Lipid Nanoparticles ~~of a platinum complex~~ of claim 1.

7. (new) The Solid Lipid Nanoparticles of claim 1, formulated in an aqueous dispersion.

8. (new) The Solid Lipid Nanoparticles of claim 1, which are lyophilized.

9. (new) The Solid Lipid Nanoparticles of claim 3, wherein the surfactant is selected from the group consisting of soja phosphatidyl-chlorine, sodium taurocholate, and mixtures thereof.

10. (new) The Solid Lipid Nanoparticles of claim 3, wherein the co-surfactant is isopropanol.

11. (new) The pharmaceutical composition of claim 5, formulated for oral administration.

12. (new) The pharmaceutical composition of claim 5, formulated for intravenous administration.

13. (new) The method of claim 6, wherein the Solid Lipid Nanoparticles are administered orally.

14. (new) The method of claim 6, wherein the Solid Lipid Nanoparticles are administered intravenously.